1. (Twice Amended) A biological material for treating mammals, comprising: at least one nucleic acid sequence containing at least one gene of therapeutic interest and a promoter and/or regulatory sequence which ensures the expression of said gene in vivo in target cells intended to be genetically modified with said nucleic acid sequence;

B1

wherein said gene of therapeutic interest encodes all or part of an antibody which will be expressed at the surface of said target cell, wherein said antibody is capable of binding to a polypeptide which is selected from the group consisting of all of part of the T-Cell Receptor (TCR) complex.

6. (Twice Amended) The biological material according to claim 3, wherein said vector is complexed with a substance selected from the group consisting of a cationic amphiphile, a cationic or neutral polymer, a protic polar compound, and an aprotic polar compound, or their derivatives.

B2

7. (Twice Amended) The biological material according to claim 1, when said nucleic acid sequence comprises a gene encoding the heavy chain of an antibody fused with a transmembrane polypeptide.

8. (Twice Amended) The biological material according to claim 7, wherein said nucleic acid sequence further contains a gene encoding the light chain of an antibody.

B3 21. (Twice Amended) The pharmaceutical composition comprising a biological material according to claim 1, advantageously in combination with a pharmaceutically acceptable vehicle.

Please add the following new claim.

B4 30. (New) The biological material according to claim 1, wherein the polypeptide is TCR-α, TCR-β, or CD3.